

Notice of Allowability

Application No.

09/871,580

Applicant(s)

MADSEN ET AL.

Examiner

Art Unit

Thanh Y. Tran

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/14/04.
2. ☒ The allowed claim(s) is/are 1-25 and 28-31.
3. ☒ The drawings filed on 24 September 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 9/4/01 & 9/24/01
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


AMIR ZARABIAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800
Part of Paper No./Mail Date 2004083

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Steven Bruess on 8/30/2004.

2. The application has been amended as follows:

Claims 26 and 27 have been canceled.

In claim 31, line 1, "26" has been changed to: --25--.

In claim 25, line 3, after the word "surface", please delete the ";" and insert: --and having a first connector;

a second printed circuit board substantially perpendicular to the first printed circuit board, the second printed circuit board having a second connector mated to the first connector of the first printed circuit board;--.

In claim 25, line 4, "a first elastomeric keypad" has been changed to: --a first silicone rubber keypad--.

In claim 25, line 5, "a first elastomeric keypad" has been changed to: --a first silicone rubber keypad--.

In claim 25, line 9, after the word "opening", please delete the period "." and insert: --;--.
And also insert in the new line (line 10): --a second surface perpendicular to the first surface;

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a cover surface having a rear portion and a top portion perpendicular to the rear portion, the cover surface being mounted to the first and second surfaces such that the rear portion is parallel to and opposite the first surface and the top portion is parallel to and opposite the second surface, and wherein the first and second printed circuit boards are disposed within an interior region defined by the first surface, second surface, and cover surface;

wherein the front surface includes an extension opening and the cover surface includes an extension disposed within the extension opening of the front surface--.

Allowable Subject Matter

3. Claims 1-25 and 28-31 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 recites, inter alia, “a communication panel comprising: a second surface substantially perpendicular to the first surface having a plurality of holes; a second printed circuit board substantially perpendicular to the first printed circuit board; and a cover surface having a top portion perpendicular to the rear portion, the cover surface is mounted to the first and second surfaces such that the rear portion is parallel to and opposite the first surface and the top portion is parallel to and apposite the second surface, and wherein the first and second printed circuit boards are disposed within an interior region which is defined by the first surface, second surface and the cover surface”; in the combination with other claimed features.

Claims 9 and 25 recite, inter alia, “a communication panel comprising: a first surface with a plurality of holes; a first printed circuit board parallel to the first surface; a first elastomeric keypad is positioned between a first side of the first surface and the first printed circuit board, the first elastomeric keypad having a plurality of buttons that protrude through the

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plurality of holes of the first surface; and a second printed circuit board substantially perpendicular to the first printed circuit board”; in the combination with other claimed features.

Claim 17 recites, inter alia, “a communication panel comprising: a first printed circuit board having a plurality of electrical contacts; a first elastomeric keypad abutting the first printed circuit board, the elastomeric keypad having a plurality of conductive contact pads aligned with the plurality of electrical contacts of the first circuit board; and a second printed circuit board substantially perpendicular to the first printed circuit board and is in electrical communication with the first printed circuit board”; in the combination with other claimed features.

5. The art of record does not disclose the above limitations, nor would it be obvious to modify the art of record so as to include the above limitations.

Hardt et al (U.S. 6,229,709) discloses in figure 1 a communication panel comprising: a first surface 20; a second surface perpendicular to the first surface 20; a second printed circuit board 16 perpendicular to the first printed circuit board 19. Hardt et al does not disclose a first surface (bottom surface 20) having a plurality of holes; and a cover surface having a top portion perpendicular to the rear portion, the cover surface is mounted to the first and second surfaces such that the rear portion is parallel to and opposite the first surface and the top portion is parallel to and apposite the second surface, and wherein the first and second printed circuit boards are disposed within an interior region which is defined by the first surface, second surface and the cover surface. Hard et al further does not disclose the communication panel having a first elastomeric keypad (first silicone rubber keypad) is positioned between a first side of the first surface and the first printed circuit board, the first elastomeric keypad having a plurality of buttons that protrude through the plurality of holes of the first surface; or a first elastomeric

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keypad abutting the first printed circuit board, the elastomeric keypad having a plurality of conductive contact pads aligned with the plurality of electrical contacts of the first circuit board.

Hodsdon (U.S. 4,621,373) discloses in figures 1-3 a communication panel having an elastomeric keypad 62 is disposed between the printed circuit board 36 and the first surface, wherein the first surface has a plurality of holes 65 and the keypad 62 has a plurality of buttons 14 that protrude through the plurality of holes 65. Hodsdon does not disclose the second printed circuit board substantially perpendicular the first printed circuit board. One of ordinary skill in the art would not have been obvious to modify the communication panel of Hardt et al to have the teaching of the communication panel in Hodsdon because the first surface 20 of Hardt did not include the plurality of holes so that the modified buttons of the keypad in Hodsdon could be protrude through the holes.

Pierre et al discloses in figure 1 a communication panel having a first surface 32 having a plurality of holes; a first printed circuit board 24 parallel to the first surface; a first elastomeric keypad 26 is positioned between a first side of the first surface 32 and the first printed circuit board 24, the first elastomeric keypad 26 having a plurality of buttons 28 that protrude through the plurality of holes 34 of the first surface 32; and a front surface 98 having at least one opening 100, wherein one or more plurality of buttons of the keypad protrude through the at least one opening. However, Pierre et al does not disclose the second printed circuit board substantially perpendicular to the first printed circuit board; a cover surface having a top portion perpendicular to the rear portion, the cover surface is mounted to the first and second surfaces such that the rear portion is parallel to and opposite the first surface and the top portion is parallel to and apposite

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the second surface, and wherein the first and second printed circuit boards are disposed within an interior region which is defined by the first surface, second surface and the cover surface.

6. The above references do not disclose the above-mentioned limitations in paragraph 4.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Y. Tran whose telephone number is (571) 272-2110. The examiner can normally be reached on M-F (9-6:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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